| | Application No. | Applicant(s) |
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| Notice of Allowability | 09/911,886 | OKAUE, TAKUMI |
| | Examiner | Art Unit |
| | Shin-Hon Chen | 2131 |
| The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHT OF THE OF | (OR REMAINS) CLOSED in this ap or other appropriate communication GHTS. This application is subject t | plication. If not included n will be mailed in due course. THIS |
| 1. This communication is responsive to RCE filed on 11/21/05 | 5. | |
| 2. X The allowed claim(s) is/are 1-4,6-12,14-22,24-30 and 32-36 | <u>3</u> . | |
| Acknowledgment is made of a claim for foreign priority un a) | been received. been received in Application No cuments have been received in this of this communication to file a reply | national stage application from the |
| noted below. Failure to timely comply will result in ABANDONMI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submit | tted. Note the attached EXAMINER | |
| INFORMAL PATENT APPLICATION (PTO-152) which give 5. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftsperse 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.6 each sheet. Replacement sheet(s) should be labeled as such in the 6. DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F | t be submitted. on's Patent Drawing Review (PTO- Amendment / Comment or in the C 84(c)) should be written on the drawing he header according to 37 CFR 1.121(sit of BIOLOGICAL MATERIAL a | -948) attached Office action of ngs in the front (not the back) of d). must be submitted. Note the |
| Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date | 6. ☐ Interview Summary Paper No./Mail Da 8), 7. ☐ Examiner's Amendr | te ment/Comment ent of Reasons for Allowance |

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DETAILED ACTION

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: The prior art of record discloses data authentication and protection system by generating MAC for a large number of individual files or messages and the system extend the MAC to form a hierarchy of messages, each responsible for the global MAC. The prior art of record individually or in combination does not explicitly disclose the keys are arranged in a hierarchical structure having a plurality levels, and the memory device is associated with a device level of said structure, and said memory device stores at least one key corresponding to a level of said structure above said device level in light of other features disclosed in independent claims 1, 8, 9, 17, 18, 19, 26, 27, 35, and 36.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ober et al. U.S. Pat. No. 6307936 discloses cryptographic key management scheme.

Richards U.S. Pat. No. 6069957 discloses method for providing hierarchical key system in restricted-access television system.

Asano U.S. Pub. No. 20020152387 discloses method for generating digital signature and public key certificate when recording data on an information recording medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen

Examiner

Art Unit 2131

PAMAY Examines AUZI31 1726/06

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